APPENDIX G – MEETING SUMMARIES



TO:	Jacob Huber Co-Project Manager KYTC Central Office 200 Mero Street Frankfort, KY 40622	Jeff Dick Co-Project Manager KYTC District Office #8 1660 US 27 Somerset, KY 42501
FROM:	Len Harper Project Manager Stantec Consulting Services Inc.	
DATE:	December 4, 2020	
SUBJECT:	US 127 Russell Springs Improvement St Russell County KYTC Item No. N/A Project Team Meeting No. 1	udy

Meeting Minutes

The first Project Team Meeting for the subject project was held virtually with Microsoft Teams on December 3, 2020 at 12:00 p.m. CST. The following individuals were in attendance:

Jay Balaji Stephen De Witte	KYTC – Central Office Planning KYTC – Central Office Planning
Jeff Dick	KYTC – District 8
Stewart Gilreath	KYTC – District 8
Joe Gossage	KYTC – District 8
Amber Hale	KYTC – District 8
Kasey Hoskins	Lake Cumberland Area Development District
Jacob Huber	KYTC – Central Office Planning
James Jones	KYTC – District 8
Matt Lawson	KYTC – Central Office Planning
William Lucas	KYTC – District 8
Connor Schurman	KYTC – Central Office Planning
Ryan Smith	KYTC – Central Office Planning
Tracy Taylor	KYTC – District 8
Scott Thomson	KYTC – Central Office Planning
Randy Turner	KYTC – Central Office Utilities
Jami West	KYTC – District 8
Drive Aldridge	Stanton Consulting Somion Ing
Brian Aldridge	Stantec Consulting Services Inc.
Len Harper	Stantec Consulting Services Inc.
Graham Winchester	Stantec Consulting Services Inc.



Len Harper welcomed everyone and said the purpose of the meeting was to discuss the progress todate for the US 127 Russell Springs Improvement Study. Len then delivered a presentation. The following enumerated items were discussed:

- 1. The purpose of the meeting is to present the results from the existing conditions analysis and to get feedback from the project team on transportation issues in the study area.
- 2. This project is federally funded with Federal State Planning and Research (SPR) Chapter 7 funds. Future phases of the project are not funded in *Kentucky's* FY 2020 FY 2026 Highway *Plan*.
- This study was a Continuous Highway Analysis Framework (CHAF) project IP20190162: Preliminary Engineering Study for Improving Safety, Increase Mobility and Capacity from US 127X/Clear Springs Rd to KY 80. (MP 14.412 – 18.902). SPR Rank #8, 23.3; SHIFT Statewide Rank 84, 44.7; SHIFT South Region Rank #50, 41.2.
- 4. The objective of this study is to identify and evaluate potential improvement options to improve safety, congestion, and mobility on US 127 between the Jamestown Bypass and KY 379 in Russell County.
- 5. Highlights from the existing conditions analysis were discussed. The study portion of US 127 is 4.95 miles in length with posted speed limits between 45 and 55 miles per hour (MPH). This two-lane principal arterial has 11- to 12-foot lanes and a two-way left-turn lane (TWLTL) with curb & gutter and sidewalk(s) from US 127X to just south of Lake Way Drive (KY 430) where it becomes an undivided two-lane road with 10-foot paved shoulders and no sidewalks. US 127 has a 20-foot raised median through the Cumberland Parkway interchange with a flush median and left-turn lanes between the ramps. North of the interchange, the roadway is once again an undivided two-lane road with 10-foot paved shoulders and left-turn lanes at KY 619, Stephens Pipe & Steel, Northridge Shopping Center, and KY 80.
- 6. Strava data was analyzed to determine pedestrian and bicycle activity in the study area. **Figure 1** presents heatmaps with blue indicating activity and white indicating significant activity.
 - Daniel Walker from KYTC will provide a statement on how to interpret Strava data.
- 7. Crash data from the Kentucky State Police database indicates that in the five years between January 1, 2015 and December 31, 2019, a total of 455 crashes were reported on the study portion of US 127. Of the 455 crashes, 61 (13 percent) were injury collisions and there were no fatal collisions during this five-year period. However, one fatal crash was reported in August 2020 when a vehicle turning left onto US 127 from West Drive was struck by a southbound vehicle. Rear end crashes (43 percent) and angle crashes (26 percent) were the most prominent types of collisions.





Figure 1: Strava Heatmaps for Pedestrian and Bicycle Activity

The Crash Data Analysis Tool (CDAT) was used to perform an Excess Expected Crashes (EEC) analysis. EEC is a measure of the crash frequency at a given site compared to what is expected based on current conditions (geometrics, traffic, etc.). A positive EEC indicates more crashes are occurring than should be expected. Results from this analysis showed most of the study portion of US 127 with a positive EEC between 1 and 6 crashes per year. The portion south of French Valley Road (KY 3280) has the highest EEC at 18 crashes per year, as shown in **Figure 2**.

The CDAT tool is not currently able to analyze intersections, so the Kentucky Transportation Center (KTC) provided intersection EECs along US 127. The intersections with French Valley Road, Lake Way Drive, Cumberland Parkway eastbound ramps, and the Kroger Entrance/Steve Dr. Connector had positive EEC values.

8. Historical KYTC traffic volumes show Annual Average Daily Traffic (AADT) volumes range from 6,800 – 15,600 vehicles per day (VPD) on the study portion of US 127.

Due to the impacts and closures from COVID-19, the project team was unable to collect turning movement counts. Instead, AM (6:45 – 7:45) and PM (2:30 – 3:30) peak hour turning movement estimates were developed using a subarea model of the Kentucky Statewide Model (KYSTM) in TransCAD version 8. Existing data used to develop the estimates included existing KYTC traffic counts, a 2017 Synchro model covering the northern portion of the study area, Streetlight origin-destination data, and drone footage of US 127 at Russell County High School. A technical memorandum detailing the development process will be provided to KYTC before the second Project Team Meeting.





Figure 2: Excess Expected Crashes (2015 - 2019)



- 9. Existing peak hour analyses were originally to be performed using Synchro. However, due to the limited capabilities of the software, peak hour simulation models were instead developed using TransModeler version 5. TransModeler is a much more robust software and allows for a more thorough analysis of Russell County High School and Middle School traffic during the morning arrival and afternoon dismissal periods.
 - Question: Was there a comparison of model delay to real delay? Answer: Yes, using the Synchro model and drone footage.
 - Question: Do the simulation models use 15-minute breakdowns of traffic? Answer: Yes, this was one of the benefits of using TransModeler.

Level of service (LOS), a qualitative measure describing operational conditions, was used to evaluate the adequacy of the existing roadway. In rural areas, LOS C or better is desirable and in urban areas, LOS D or better is desirable. Results from the existing simulation model analysis show that all study area intersections operate at a LOS C or better during the AM peak hour, as shown in **Figure 3**. Within the peak 15 minutes, however, the US 127 intersection with French Valley Road/Russell County Schools operates at LOS E.

During the PM peak hour, the French Valley Road intersection operates at LOS E and the KY 619 intersection operates at LOS D with all other intersections operating at LOS C or better. It should be noted, however, that the eastbound Cumberland Parkway ramp approach operates at LOS F and the westbound Cumberland Parkway ramp approach operates at LOS E, as shown in Figure 3.

- 10. Preliminary 2045 traffic forecasts were developed based on historical KYTC traffic counts and data from the KYSTM. Traffic count station data for the 20-year period between 2000 and 2020 show an average annual growth rate of 0.72 percent per year while annual growth from the KYSTM ranges between 0.51 percent to 0.81 percent. It should be noted that the following developments were included in the KYSTM:
 - Dollar General on Apache Avenue
 - o 9,100 sqft
 - Davis Distributing Metal Fabrication Facility on Airport Road
 - o 50 employees
 - o 50,000 to 100,000 sqft
 - Development in the NE quadrant of the parkway interchange
 - o 5 acres
 - o 4 small restaurants expected
 - Lake Cumberland Regional College and Workforce Center
 - o 58,000 sqft
 - No additional students or staff are anticipated on the school property during normal hours. There is a vocational school on the property already and staff and students will just be attending the new building, rather than the old one.





Figure 3: Existing AM and PM Peak Hour Level of Service (LOS)

Based on forecasts from the Kentucky State Data Center, Russell County's population is expected to grow at an annual rate of 0.16 percent per year to the horizon year 2045. This growth rate was used to grow the traffic from the middle and high school. Based on data from historical KYTC counts and the Kentucky Statewide Traffic Model (KYSTM), traffic coming from and going to the Cumberland Parkway has a growth rate of 1.5 percent per year.

2045 traffic forecasts for the remaining portions of US 127 were developed based on historical KYTC traffic counts, potential developments identified in the study area, and data from the KYSTM. Traffic count station data for the 20-year period between 2000 and 2020 show an average annual growth rate of 0.72 percent per year while annual growth from the KYSTM (with the additional developments added) ranges between 0.51 percent to 0.81 percent. Utilizing an annual growth rate of 0.75 percent, the 2045 traffic on US 127 will range from 8,000 VPD to 18,800 VPD as shown in **Table 1**.



Route	Beg MP	End MP	KYSTM Annual GR	Annual GR	2020 ADT	2045 ADT	US 127 Location
US 127	14.142	16.618	0.71%	0.75%	11,900	13,900	South of RCHS
	16.618	16.921	0.71%		15,600	18,800	RCHS & RCMS
	16.921	17.891	0.80%		14,000	16,300	Cumb. Pkwy
	17.891	18.154	0.81%		14,800	17,200	KY 619
	18.154	18.902	0.60%		11,700	13,500	KY 80
	18.902	20.495	0.51%		6,900	8,000	KY 379

Table 1: Preliminary Traffic Forecasts

11. Future year (2045) No-Build peak hour simulation models were developed using the existing simulation model networks. During the AM peak hour, all study area intersections are expected to operate at LOS D or better, as shown in **Figure 4**. During the PM peak hour, the French Valley Road and KY 619 intersections are expected to operate at LOS F and E, respectively. While the intersections operate at LOS D and C, both Cumberland Parkway ramp approaches are expected to operate at LOS F during the PM peak hour, as shown in Figure 4.



Figure 4: 2045 AM and PM Peak Hour Level of Service (LOS)



12. The next steps will be for Stantec to submit a traffic forecast and existing simulation model technical memorandum to KYTC's Multi Modal Branch and to finalize the public outreach materials. A second Project Team meeting will be held after the first round of Public Outreach.

There was a discussion about the public involvement. A virtual meeting will be held with the Local Officials / Stakeholders during the three-week State Legislature break in January 2021. The purpose of the meeting will be to present the existing conditions analysis and to get feedback from Stakeholders on transportation issues in the study area.

• Poll questions will be used to solicit input of attendees.

To engage the public, an online Story Map is being developed to present information about the project. A survey will be available to solicit feedback on transportation issues and problem areas. A press release will be developed with a link to the Story Map, which will be located on the District 8 website. District 8 will also post this information on its social media accounts and work with the Russell County Schools to send out an email blast.

The meeting ended at approximately 1:15 p.m. CST.



TO:	Jacob Huber Co-Project Manager KYTC Central Office 200 Mero Street Frankfort, KY 40622	Jeff Dick Co-Project Manager KYTC District Office #8 1660 US 27 Somerset, KY 42501	
FROM:	Len Harper Project Manager Stantec Consulting Services Inc.		
DATE:	January 22, 2021		
SUBJECT:	US 127 Russell Springs Improvement St Russell County KYTC Item No. N/A Local Officials/Stakeholder Meeting No		

Meeting Minutes

The first Local Officials/Stakeholder Meeting for the subject project was held virtually with Microsoft Teams on January 13, 2021 at 1:00 p.m. CST. The following individuals were in attendance:

Wayne Ackerman Josh Branscum Michael Ford	Russell County School System State Representative Russell County School System
Jackie Grider	Russell County School System
Kasey Hoskins	Lake Cumberland Area Development District
Lt. Jeremy Johnson	Kentucky State Police
Janette Marson	Lake Cumberland Tourist Commission
Darryl McGaha	Lake Cumberland Area Development District
Gary Robertson	Russell County Judge Executive
Sarah Roy	Russell County School System
Nick Shearer	Mayor of Jamestown
Melissa Taylor	Russell Springs Police Department
Eric West	DUO Broadband
Gary Wheat	Russell County 911 System
Stephen De Witte	KYTC – Central Office Planning
Jeff Dick	KYTC – District 8
Stewart Gilreath	KYTC – District 8
Joe Gossage	KYTC – District 8
Amber Hale	KYTC – District 8
Jacob Huber	KYTC – Central Office Planning
James Jones	KYTC – District 8
Matt Lawson	KYTC – Central Office Planning



William Lucas	KYTC – District 8
Conley Moren	KYTC – District 8
Steve Ross	KYTC – Central Office Planning
Tracy Taylor	KYTC – District 8
Randy Turner	KYTC – Central Office Design
Brian Aldridge	Stantec Consulting Services Inc.
Len Harper	Stantec Consulting Services Inc.
Graham Winchester	Stantec Consulting Services Inc.

Len Harper welcomed everyone and, after introducing the project team, delivered a presentation on progress to date for the US 127 Russell Springs Improvement Study. The following enumerated items were discussed:

- 1. The purpose of the meeting is to present the existing conditions analysis and to get feedback from the local officials and stakeholders on transportation issues along the study portion of US 127, as shown in **Figure 1**.
- 2. The project team includes representatives from the Kentucky Transportation Cabinet (KYTC) Central Office Division of Planning and District 8, the Lake Cumberland Area Development District (LCADD), and the consultant Stantec.
- 3. The study originally planned for two in-person local official/stakeholder meetings and two in-person public meetings. Due to the COVID-19 pandemic, the first round of public outreach will be virtual. A study website¹ has been created with a link to an online Story Map² to communicate basic study information and provide a survey to solicit feedback from the public.
- 4. The goal of the study is to identify and evaluate potential improvement options to improve safety, congestion, and mobility on US 127 between the Jamestown Bypass and KY 379 in Russell County.
- 5. Highlights from the existing conditions analysis were discussed. The study portion of US 127 is 4.95 miles in length with posted speed limits between 45 and 55 miles per hour (MPH). This two-lane principal arterial has 11- to 12-foot lanes and a two-way left-turn lane (TWLTL) with curb & gutter and sidewalk(s) from US 127X to just south of Lake Way Drive (KY 430) where it becomes an undivided two-lane road with 10-foot paved shoulders and no sidewalks. US 127 has a 20-foot raised median through the Cumberland Parkway interchange with a flush median and left-turn lanes between the ramps. North of the interchange, the roadway is once again an undivided two-lane road with 10-foot paved shoulders and left-turn lanes at KY 619, Stephens Pipe & Steel, Northridge Shopping Center, and KY 80.

¹ https://transportation.ky.gov/DistrictEight/Pages/US-127-Russell-Springs-Improvement-Study.aspx

² https://storymaps.arcgis.com/stories/8587b5f7cc424920b2247c6f90f921a2





Figure 1: US 127 Study Area



- 6. Crash data from the Kentucky State Police database indicate that in the five years between January 1, 2015 and December 31, 2019, a total of 455 crashes were reported on the study portion of US 127. Of the 455 crashes, 61 (13 percent) were injury collisions and there were no fatal collisions during this five-year period. However, one fatal crash was reported in August 2020 when a vehicle turning left onto US 127 from West Drive was struck by a southbound vehicle. Rear end crashes (43 percent) and angle crashes (26 percent) were the most prominent types of collisions.
 - It was noted that the Bernard Lane intersection frequently experiences crashes. These crashes are likely due to the lack of a designated turn lane from US 127. Developers have constructed access roads parallel to US 127, but crashes continue to occur.

The Crash Data Analysis Tool (CDAT) was used to perform an Excess Expected Crashes (EEC) analysis. EEC is a measure of the crash frequency at a given site compared to what is expected based on current conditions (geometrics, traffic, etc.). A positive EEC indicates more crashes are occurring than should be expected. Results from this analysis showed most of the study portion of US 127 with a positive EEC between 1 and 6 crashes per year. The portion south of French Valley Road (KY 3280) has the highest EEC at 18 crashes per year. Additionally, the US 127 intersections with French Valley Road, Lake Way Drive, Voils Road, Cumberland Parkway eastbound ramps, and the Kroger Entrance/Steve Dr. Connector had positive EEC values.

7. Historical KYTC traffic volumes show Annual Average Daily Traffic (AADT) volumes range from 6,800 – 15,600 vehicles per day (VPD) on the study portion of US 127. Level of service (LOS), a qualitative measure describing operational conditions, was used to evaluate the adequacy of the existing roadway. In rural areas, LOS C or better is desirable and in urban areas, LOS D or better is desirable. Results from the existing simulation model analysis show that all study area intersections operate at a Level of Service C or better during the AM peak hour. During the PM peak hour, the French Valley Road intersection operates at LOS E and the KY 619 intersection operates at LOS D with all other intersections operating at LOS C or better, as shown in **Figure 2**.

Within the PM peak hour, there is a peak 30-minute period starting at 2:30 PM when the Russell County Middle and High Schools dismiss students and several local businesses and factories have shift changes. This concurrent influx of vehicles causes significant congestion on US 127 and adjacent roadways. Along with transportation improvements, this study will work with local business and schools to determine the feasibility of staggering school dismissal and shift changes.

• The Russell County School System is open to discussions regarding their afternoon dismissal patterns.





Figure 2: Existing PM Peak Hour Level of Service



8. Based on forecasts from the Kentucky State Data Center, Russell County's population is expected to grow at an annual rate of 0.16 percent per year to the horizon year 2045. This growth rate was used to grow the traffic from the middle and high school. Based on data from historical KYTC counts and the Kentucky Statewide Traffic Model (KYSTM), traffic coming from and going to the Cumberland Parkway has a growth rate of 1.5 percent per year.

2045 traffic forecasts for the remaining portions of US 127 were developed based on historical KYTC traffic counts, potential developments identified in the study area, and data from the KYSTM. Traffic count station data for the 20-year period between 2000 and 2020 show an average annual growth rate of 0.72 percent per year while annual growth from the KYSTM (with the additional developments added) ranges between 0.51 percent to 0.81 percent. Utilizing an annual growth rate of 0.75 percent, the 2045 traffic on US 127 will range from 8,000 VPD to 18,800 VPD.

- 9. Future year (2045) No-Build peak hour simulation models were developed using the existing simulation model networks. During the AM peak hour, all study area intersections are expected to operate at LOS D or better. During the PM peak hour, the French Valley Road and KY 619 intersections are expected to operate at LOS F and E, respectively.
- 10. Throughout the presentation, the local officials and stakeholders were asked to answer survey questions to solicit input on transportation issues along US 127. When asked how often they travel US 127 in Russell Springs, 10 respondents indicated that they travel the corridor daily, one respondent travels it monthly, and one never travels the corridor.

The second question asked which transportation goal is the most important for this planning study. Six respondents indicated that reducing congestion is most important and four respondents indicated that improving safety is most important.





The third question asked respondents to choose the top safety concern on US 127 through the study area. Lack of designated turn lanes was the most common choice (10 responses), followed by high travel speeds and poor access management.



Question four asked respondents to choose the top traffic concern on US 127 through the study area. Traffic congestion from schools was the most common answer (six responses), followed by lack of designated turn lanes.





The final question asked respondents to indicate the top trouble spot on US 127 that should be addressed as part of this planning study. The top choice was US 127 at the Cumberland Parkway (6 responses) followed by US 127 at French Valley Road/Russell County Schools (3 responses).



- 11. The next step will be to examine results from the first round of public outreach. Preliminary improvement concepts will be developed based on this input, along with results from the existing and future conditions analyses. These improvement strategies will be presented at the second local officials/stakeholder meeting in late Spring 2021.
 - KYTC District 8 will provide a press release for the Russell County Schools to send in an email to parents/guardians of students. This email will also include a link to the online Story Map and survey.

The meeting ended at approximately 1:45 p.m. CST.



TO:	Jacob Huber Co-Project Manager KYTC Central Office 200 Mero Street Frankfort, KY 40622	Jeff Dick Co-Project Manager KYTC District Office #8 1660 US 27 Somerset, KY 42501
FROM:	Len Harper Project Manager Stantec Consulting Services Inc.	
DATE:	May 14, 2021	
SUBJECT:	US 127 Russell Springs Improvement Str Russell County KYTC Item No. N/A Project Team Meeting No. 2	udy

Meeting Minutes

The second Project Team Meeting for the subject project was held virtually with Zoom on April 20, 2021 at 9:30 a.m. CDT. The following individuals were in attendance:

Jay Balaji	KYTC – Central Office Planning
Stephen De Witte	KYTC – Central Office Planning
Jeff Dick	KYTC – District 8
Kayla Frye	KYTC – District 8
Stewart Gilreath	KYTC – District 8
Joe Gossage	KYTC – District 8
Amber Hale	KYTC – District 8
Kasey Hoskins	Lake Cumberland Area Development District
Jacob Huber	KYTC – Central Office Planning
James Jones	KYTC – District 8
Matt Lawson	KYTC – Central Office Planning
Conley Moren	KYTC – District 8
Amanda Parmley	KYTC – District 8
Mikael Pelfrey	KYTC – Central Office Planning
Connor Schurman	KYTC – Central Office Planning
Ryan Smith	KYTC – Central Office Planning
Tracy Taylor	KYTC – District 8
Randy Turner	KYTC – Central Office Utilities
Jami West	KYTC – District 8
Brian Aldridge	Stantec Consulting Services Inc.
Len Harper	Stantec Consulting Services Inc.
Graham Winchester	Stantec Consulting Services Inc.



Len Harper welcomed everyone and delivered a presentation on the progress to-date for the US 127 Russell Springs Improvement Study. The following enumerated items were discussed:

- 1. The purpose of the meeting is to present the results from the first round of public involvement and to get feedback from the project team on preliminary improvement concepts.
- 2. This project is federally funded with Federal State Planning and Research (SPR) Chapter 7 funds. Future phases of the project are not funded in *Kentucky's* FY 2020 FY 2026 Highway *Plan*.
- This study was a Continuous Highway Analysis Framework (CHAF) project IP20190162: Preliminary Engineering Study for Improving Safety, Increase Mobility and Capacity from US 127X/Clear Springs Rd to KY 80. (MP 14.412 – 18.902).
- 4. The goal of this study is to evaluate potential improvement options to improve safety, mobility, and congestion on US 127 between the Jamestown Bypass (US 127X) and Lakeway Drive (KY 379) in Russell County.
- 5. Highlights from the existing conditions analysis were discussed. The study portion of US 127 is 4.95 miles in length with posted speed limits between 45 and 55 miles per hour (MPH). This two-lane principal arterial has 11- to 12-foot lanes and a two-way left-turn lane (TWLTL) with curb & gutter and sidewalk(s) from the Jamestown Bypass to just south of Lake Way Drive (KY 430) where it becomes an undivided two-lane road with 10-foot paved shoulders and no sidewalks. US 127 has a 20-foot raised median through the Cumberland Expressway interchange with a flush median and left-turn lanes between the ramps. North of the interchange, the roadway is once again an undivided two-lane road with 10-foot paved shoulders and left-turn lanes at KY 619, Stephens Pipe & Steel, Northridge Shopping Center, and KY 80.
- 6. Crash data from the Kentucky State Police database indicates that in the five years between January 1, 2015 and December 31, 2019, a total of 455 crashes were reported on the study portion of US 127. Of the 455 crashes, 61 (13 percent) were injury collisions and there were no fatal collisions during this five-year period.

The Crash Data Analysis Tool (CDAT) was used to perform an Excess Expected Crashes (EEC) analysis. EEC is a measure of the crash frequency at a given site compared to what is expected based on current conditions (geometrics, traffic, etc.). A positive EEC indicates more crashes are occurring than should be expected. Results from this analysis showed most of the study portion of US 127 with a positive EEC.

7. Historical KYTC traffic volumes show Annual Average Daily Traffic (AADT) volumes range from 6,800 – 15,600 vehicles per day (VPD) on the study portion of US 127. Results from the existing simulation model analysis show that all study area intersections operate at a LOS C or better during the AM peak hour.



During the PM peak hour, the French Valley Road intersection operates at LOS E and the KY 619 intersection operates at LOS D with all other intersections operating at LOS C or better. It should be noted, however, that the eastbound Cumberland Expressway ramp approach operates at LOS F and the westbound Cumberland Expressway ramp approach operates at LOS E.

- 8. 2045 traffic forecasts were developed based on historical KYTC traffic counts and data from the Kentucky Statewide Traffic Model. Traffic on the study portion of US 127 is expected to range from 8,000 VPD to 18,800 VPD in 2045. Future year (2045) No-Build peak hour simulation models were developed using the existing simulation model networks. During the AM peak hour, all study area intersections are expected to operate at LOS D or better. During the PM peak hour, the French Valley Road and KY 619 intersections are expected to operate at LOS F and E, respectively. While the intersections operate at LOS F during the PM peak hour.
- 9. There was a discussion of the feedback from the first round of public outreach. Due to COVID-19 restrictions, the project team was unable to host an in-person public meeting. An online StoryMap, with a survey and mapping exercise, was made available between January 14, 2021 and February 15, 2021. The following is a summary of the results from the survey and mapping exercise.

Of the 152 participants in the survey, 56 (37 percent) indicated that they heard about the study from social media, 36 (24 percent) from the Russell County School email, and 22 (14 percent) from a friend or neighbor.





The next question asked if participants live or work within the study area. 124 (82 percent) responded that they live and/or work within the study area. The highest reported zip codes were 42642 (Russell Springs) and 42629 (Jamestown), accounting for nearly 86 percent of the write in zip codes.



When asked how often they drive on the study corridor of US 127, the majority (91 percent) of respondents indicated that they drive through the area daily or several times per week.



Respondents were then asked which transportation goal is most important to them. Reducing congestion (52 percent) and improving safety (40 percent) were the most common responses.





The next question asked respondents to rank their top concerns (#1 - #10) on the study portion of US 127. The top three concerns were all traffic related – school traffic, local business traffic, and "thru" traffic.





There was a discussion of results from the interactive mapping exercise. Respondents were asked to indicate concerns and potential improvements on a map. There were 102 points identified through this exercise, categorized as "concerns" or "improvements," as shown in **Figure 1**. The locations on US 127 with the most points included the following:

- US 127 at the Russell County Schools
 - o Concerns: congestion
 - o Suggested improvements: turn lanes, improved signal timing, roundabout
- US 127 Interchange with the Cumberland Expressway
 - Concerns: safety, difficulty turning onto US 127 during peak periods
 - Suggested improvements: turn lanes, traffic signal
- US 127 at Bernard Lane
 - Concerns: congestion, difficulty turning onto US 127 during peak periods
 - o Suggested improvements: turn lanes, traffic signal
- US 127 at Progress Drive
 - o Concerns: congestion
 - Suggested improvements: turn lanes, traffic signal
- US 127 at FiveStar/Voils Road
 - o Concerns: safety, difficulty turning onto US 127 during peak periods
 - Suggested improvements: turn lanes, traffic signal

The non-US 127 locations with the most points included the following:

- KY 379 at KY 430
 - o This intersection was recently converted to a four-way stop
 - o Responses indicate that the four-way stop is preferred over a signal
- KY 80 at Lakeway Drive
 - Congestion, safety concerns due to the skewed intersection
 - Suggested improvements: traffic signal
- Curve on KY 80
 - o Concerns: speeding around the curve, skewed intersections
 - Suggested improvements: Widening
- New Cumberland Expressway interchange at KY 379

Overall, congestion seems to be the most important issue for US 127 travelers in Russell County. Drivers are particularly concerned with peak hour congestion due to morning arrival and afternoon dismissal of the Russell County Schools. The school traffic, in combination with traffic from factories and local businesses, not only increases travel times, but also creates a constant flow of traffic and makes it difficult to turn onto US 127 from unsignalized intersecting roadways. This is especially true at the Cumberland Expressway interchange, where traffic queues on the ramps due to the lack of turning opportunities during the peak hours. This creates safety issues, which was the second most important issue for most survey participants, especially for vehicles turning left onto US 127.





Figure 1: Mapping Exercise Results



- 10. On February 4th, 2021, members of the Project Team met virtually with the Russell County Industrial Development Authority. The following summarizes the meeting:
 - The Lake Cumberland Regional Complex is expected to develop on French Valley Road. Since this new development will add truck traffic onto US 127, it was requested that this study consider a new Cumberland Expressway interchange at KY 379 as an alternate route for trucks. There was also a request for install signs for the complex on the Expressway.
 - A new connection between Progress Drive and Brian Walters Drive should also be considered.
 - The existing signal at Fruit of the Loom Drive is probably not needed.
 o It may be beneficial to move this signal to Progress Drive or Brian Walters Drive once the new connection is made.
 - When asked, they said the local businesses might be willing to stagger shift changes away from the Russel County School dismissal if that would help.
- 11. Len then led a discussion of preliminary improvement concepts. The concepts were split up into three geographical areas: US 127 improvements from the Cumberland Expressway interchange to KY 379 (Figure 2), US 127 improvements south of the Cumberland Expressway interchange (Figure 3), and non-US 127 improvements (Figure 4).

After discussion, the project team decided to remove two of the preliminary improvement concepts from further consideration:

- Relocate McDonalds Entrance: The cause of the queue spill over is likely from the temporary closure of indoor dinning due to COVID.
- KY 80 and KY 379 Intersection Realignment: This project is already under design through the HSIP contract (KYTC Item No. 8-9012).





Figure 2: US 127 Improvement Concepts from the Cumberland Expressway to KY 379





Figure 3: US 127 Improvement Concepts South of the Cumberland Expressway





Figure 4: Non-US 127 Improvement Concepts



12. The next step is for Stantec to develop materials for the second Local Officials/Stakeholder Meeting. After this meeting, a second public outreach online StoryMap and survey will be made available to the public to get feedback on the improvement concepts.

The meeting ended at approximately 11:00 a.m. CDT.



TO:	Jacob Huber Co-Project Manager KYTC Central Office 200 Mero Street Frankfort, KY 40622	Jeff Dick Co-Project Manager KYTC District Office #8 1660 US 27 Somerset, KY 42501
FROM:	Len Harper Project Manager Stantec Consulting Services Inc.	
DATE:	June 21, 2021	
SUBJECT:	US 127 Russell Springs Improvement St Russell County KYTC Item No. N/A Local Officials/Stakeholder Meeting No	

Meeting Minutes

The second Local Officials/Stakeholder Meeting for the subject project was held virtually with Microsoft Teams on June 16, 2021 at 1:00 p.m. CST. The following individuals were in attendance:

Patrick Branco	Russell County Hospital
Josh Branscum	State Representative
Michael Ford	Russell County School System
Jackie Grider	Russell County School System
Jeff Kerns	City of Jamestown
Sarah Roy	Russell County School System
Stephen De Witte Jeff Dick Stewart Gilreath Joe Gossage Amber Hale Kasey Hoskins Jacob Huber Matt Lawson Amanda Parmley Mikael Pelfrey Steve Ross Randy Turner	KYTC – Central Office Planning KYTC – District 8 KYTC – District 8 KYTC – District 8 KYTC – District 8 Lake Cumberland Area Development District KYTC – Central Office Planning KYTC – Central Office Planning KYTC – District 8 KYTC – Central Office Planning KYTC – Central Office Planning KYTC – Central Office Planning KYTC – Central Office Planning
Brian Aldridge	Stantec Consulting Services Inc.
Len Harper	Stantec Consulting Services Inc.
Graham Winchester	Stantec Consulting Services Inc.



Len Harper welcomed everyone and, after introducing the project team, delivered a presentation on progress to date for the US 127 Russell Springs Improvement Study. The following enumerated items were discussed:

- 1. The purpose of the meeting is to present the results from the first round of public involvement and to get feedback from the local officials/stakeholders on preliminary improvement concepts.
- 2. This project is federally funded with Federal State Planning and Research (SPR) Chapter 7 funds. Future phases of the project are not funded in *Kentucky's* FY 2020 FY 2026 Highway *Plan*.
- This study was a Continuous Highway Analysis Framework (CHAF) project IP20190162: Preliminary Engineering Study for Improving Safety, Increase Mobility and Capacity from US 127X/Clear Springs Rd to KY 80. (MP 14.412 – 18.902).
- 4. The goal of this study is to evaluate potential improvement options to improve safety, mobility, and congestion on US 127 between the Jamestown Bypass (US 127X) and Lakeway Drive (KY 379) in Russell County.
- 5. Highlights from the existing conditions analysis were discussed. The study portion of US 127 is 4.95 miles in length with posted speed limits between 45 and 55 miles per hour (MPH). This two-lane principal arterial has 11- to 12-foot lanes and a two-way left-turn lane (TWLTL) with curb & gutter and sidewalk(s) from the Jamestown Bypass to just south of Lake Way Drive (KY 430) where it becomes an undivided two-lane road with 10-foot paved shoulders and no sidewalks. US 127 has a 20-foot raised median through the Cumberland Expressway interchange with a flush median and left-turn lanes between the ramps. North of the interchange, the roadway is once again an undivided two-lane road with 10-foot paved shoulders and left-turn lanes at KY 619, Stephens Pipe & Steel, Northridge Shopping Center, and KY 80.
- 6. Historical KYTC traffic volumes show Annual Average Daily Traffic (AADT) volumes range from 6,800 15,600 vehicles per day (VPD) on the study portion of US 127. Results from the existing simulation model analysis show that all study area intersections operate at a LOS C or better during the AM peak hour.

During the PM peak hour, the French Valley Road intersection operates at LOS E and the KY 619 intersection operates at LOS D with all other intersections operating at LOS C or better. It should be noted, however, that the eastbound Cumberland Expressway ramp approach operates at LOS F and the westbound Cumberland Expressway ramp approach operates at LOS E.

7. 2045 traffic forecasts were developed based on historical KYTC traffic counts and data from the Kentucky Statewide Traffic Model. Traffic on the study portion of US 127 is expected to range from 8,000 VPD to 18,800 VPD in 2045. Future year (2045) No-Build peak hour simulation models were developed using the existing simulation model networks. During the



AM peak hour, all study area intersections are expected to operate at LOS D or better. During the PM peak hour, the French Valley Road and KY 619 intersections are expected to operate at LOS F and E, respectively. While the intersections operate at LOS D and C, both Cumberland Expressway ramp approaches are expected to operate at LOS F during the PM peak hour.

8. There was a discussion of the feedback from the first round of public outreach. Due to COVID-19 restrictions, the project team was unable to host an in-person public meeting. An online StoryMap, with a survey and mapping exercise, was made available between January 14, 2021 and February 15, 2021. The following is a summary of the results from the survey and mapping exercise.

Of the 152 participants in the survey, 56 (37 percent) indicated that they heard about the study from social media, 36 (24 percent) from the Russell County School email, and 22 (14 percent) from a friend or neighbor.



The next question asked if participants live or work within the study area. 124 (82 percent) responded that they live and/or work within the study area. The highest reported zip codes were 42642 (Russell Springs) and 42629 (Jamestown), accounting for nearly 86 percent of the write in zip codes.





When asked how often they drive on the study corridor of US 127, the majority (91 percent) of respondents indicated that they drive through the area daily or several times per week.



Respondents were then asked which transportation goal is most important to them. Reducing congestion (52 percent) and improving safety (40 percent) were the most common responses.





The next question asked respondents to rank their top concerns (#1 - #10) on the study portion of US 127. The top three concerns were all traffic related – school traffic, local business traffic, and "thru" traffic.





There was a discussion of results from the interactive mapping exercise. Respondents were asked to indicate concerns and potential improvements on a map. There were 102 points identified through this exercise, categorized as "concerns" or "improvements," as shown in **Figure 1**. The locations on US 127 with the most points included the following:

- US 127 at the Russell County Schools
 - o Concerns: congestion
 - o Suggested improvements: turn lanes, improved signal timing, roundabout
- US 127 Interchange with the Cumberland Expressway
 - Concerns: safety, difficulty turning onto US 127 during peak periods
 - Suggested improvements: turn lanes, traffic signal
- US 127 at Bernard Lane
 - Concerns: congestion, difficulty turning onto US 127 during peak periods
 - o Suggested improvements: turn lanes, traffic signal
- US 127 at Progress Drive
 - o Concerns: congestion
 - Suggested improvements: turn lanes, traffic signal
- US 127 at FiveStar/Voils Road
 - o Concerns: safety, difficulty turning onto US 127 during peak periods
 - Suggested improvements: turn lanes, traffic signal

The non-US 127 locations with the most points included the following:

- KY 379 at KY 430
 - o This intersection was recently converted to a four-way stop
 - o Responses indicate that the four-way stop is preferred over a signal
- KY 80 at Lakeway Drive
 - Congestion, safety concerns due to the skewed intersection
 - Suggested improvements: traffic signal
- Curve on KY 80
 - o Concerns: speeding around the curve, skewed intersections
 - Suggested improvements: Widening
- New Cumberland Expressway interchange at KY 379

Overall, congestion seems to be the most important issue for US 127 travelers in Russell County. Drivers are particularly concerned with peak hour congestion due to morning arrival and afternoon dismissal of the Russell County Schools. The school traffic, in combination with traffic from factories and local businesses, not only increases travel times, but also creates a constant flow of traffic and makes it difficult to turn onto US 127 from unsignalized intersecting roadways. This is especially true at the Cumberland Expressway interchange, where traffic queues on the ramps due to the lack of turning opportunities during the peak hours. This creates safety issues, which was the second most important issue for most survey participants, especially for vehicles turning left onto US 127.





Figure 1: Mapping Exercise Results


- 9. Len then led a discussion of preliminary improvement concepts. The concepts were split up into three geographical areas: US 127 improvements from the Cumberland Expressway interchange to KY 379 (Figure 2), US 127 improvements south of the Cumberland Expressway interchange (Figure 3), and non-US 127 improvements (Figure 4). The local officials/stakeholders were asked to pick their top improvement priorities for each of the geographic areas.
 - When asked to pick their top priority of US 127 projects at the northern end of the study corridor, five of the six respondents (83 percent) indicated that installing traffic signals at the Cumberland Expressway was the top priority while one respondent indicated that having dedicated left-turn lanes at the KY 619 intersection was the top priority.
 - Question: Was a dedicated right-turn lane from the Cumberland Expressway considered without new traffic signals?
 - Answer: Yes, this scenario was analyzed and will be discussed in the report.Question: Was a roundabout considered at KY 619?

Answer: Yes, a roundabout was analyzed at this location

0%
17%
83%
0%

- When asked to pick their top priority of US 127 projects south of the Cumberland Expressway, two of the five respondents (40 percent) indicated that realigning the right-turn lane at the KY 430 intersection was the highest priority.
 - It was noted that the signal at Fruit of the Loom Drive still has significant traffic due to the gas station. Removing the signal could be a safety concern.
 - Question: Were traffic signals considered at Voils Rd. and KY 430? Answer: Yes, signals were considered. Turning movement counts are required for complete signal warrant analyses.
 - Question: What adjustments are proposed for the dismissal shift? Answer: The dismissal/shift changes will be shifted 15 minutes.



20%
0%
40%
0%
20%
20%
0%

• When asked to pick their top priority of non-US 127 projects, two of the five respondents (40 percent) indicated that staggering shift changes is the highest priority.

1. Please pick your top priority.	
Concept 11: New Interchange at KY 379	0%
Concept 12: New Connector to KY 619	20%
Concept 13: New Connector on Progress Dr	20%
Concept 14: Stagger shift changes	40%
Concept 15: KY 80 Access Management	0%
Concept 16: KY 80/KY 430/High Street Intersections	20%
Concept 17: McDonald's	0%





Figure 2: US 127 Improvement Concepts from the Cumberland Expressway to KY 379





Figure 3: US 127 Improvement Concepts South of the Cumberland Expressway





Figure 4: Non-US 127 Improvement Concepts



10. The next step is for Stantec to develop materials for the second public outreach online StoryMap and survey.

The meeting ended at approximately 2:00 p.m. CST.



TO:	Jacob Huber Co-Project Manager KYTC Central Office 200 Mero Street Frankfort, KY 40622	Jeff Dick Co-Project Manager KYTC District Office #8 1660 US 27 Somerset, KY 42501
FROM:	Len Harper Project Manager Stantec Consulting Services Inc.	
DATE:	October 20, 2021	
SUBJECT:	US 127 Russell Springs Improvement St Russell County KYTC Item No. N/A Project Team Meeting No. 3	udy

Meeting Minutes

The third and final Project Team Meeting for the subject study was held virtually with Microsoft Teams on October 14, 2021, at 10:00 a.m. CDT. The following individuals were in attendance:

KYTC – Central Office Planning KYTC – District 8 KYTC – District 8 KYTC – District 8 Lake Cumberland Area Development District KYTC – Central Office Planning KYTC – District 8 KYTC – Central Office Planning KYTC – Central Office Planning KYTC – Central Office Planning KYTC – Central Office Planning KYTC – District 8
Stantec Consulting Services Inc. Stantec Consulting Services Inc. Stantec Consulting Services Inc.



Len Harper welcomed everyone and delivered a presentation on the progress to-date for the US 127 Russell Springs Improvement Study. The following enumerated items were discussed:

- 1. The purpose of the meeting is to present the results from the second round of public involvement and to get feedback from the project team on improvement concept prioritization.
- 2. This study is federally funded with Federal State Planning and Research (SPR) Chapter 7 funds. Future phases of the project are not funded in *Kentucky's* FY 2020 FY 2026 Highway *Plan*.
- This study was a Continuous Highway Analysis Framework (CHAF) project IP20190162: Preliminary Engineering Study for Improving Safety, Increase Mobility and Capacity from US 127X/Clear Springs Rd to KY 80. (MP 14.412 – 18.902).
- 4. The goal of this study is to evaluate potential improvement options to improve safety, mobility, and congestion on US 127 between the Jamestown Bypass (US 127X) and Lakeway Drive (KY 379) in Russell County.
- 5. There was a discussion of the feedback from the second round of public outreach. Due to COVID-19 restrictions, the project team was unable to host an in-person public meeting. An online StoryMap and survey were made available between August 23, 2021 and October 4, 2021. The following is a summary of the results from the survey.

Of the 184 people who answered question one in the survey, 90 (48 percent) indicated that they heard about the study from social media, 36 (19.4 percent) from the radio or local newspaper, and 35 (18.8 percent) from a Russell County Schools email.





Of the 186 people who answered question two in the survey, 128 (69 percent) indicated that they drive the study portion of US 127 daily, 48 (26 percent) drive it weekly, and 10 (5 percent) drive it monthly.



The next question asked if participants live or work within the study area. 152 (82 percent) responded that they live and/or work within the study area. The highest reported zip codes were 42642 (Russell Springs) and 42629 (Jamestown), accounting for nearly 90 percent of the recorded zip codes.





Respondents were then asked to rank the short-term improvement concepts #1 (most preferred) through #7 (least preferred). The concepts received seven points for a first-place vote, six points for a second-place vote, and so on. Installing traffic signals at the Cumberland Expressway Interchange received the most points, followed by left turn lanes on US 127 through Bernard Lane and left turn lanes on KY 619. Staggering the afternoon school dismissal and shift changes received the second most first place votes.





Respondents were then asked to rank the long-term improvement concepts #1 (most preferred) through #9 (least preferred). The improvement concepts received nine points for a first-place vote, eight points for a second-place vote, and so on. Constructing additional through lanes on US 127 at KY 619 received the most points followed by access management and constructing a two-way left-turn lane (TWLTL) on KY 80.



When asked if any of the improvement concepts should be removed from consideration, the roundabout at French Valley Road received the most votes with 39, as shown in the table below. Removing the traffic signal at Fruit of the Loom Drive, removing cut through traffic on Cade Avenue and constructing a new Cumberland Expressway interchange at KY 379 received the next most with seven votes each.

- Concerns with the roundabout included that it would make traffic worse, that the high speeds on US 127 would make it dangerous, that trucks would have trouble navigating through it, and that it would cause pedestrian safety issues near the schools.
- Several respondents indicated that the gas station at the Fruit of the Loom intersection generated significant traffic and that the signal is still needed. This concern was also mentioned at the second Local Officials/Stakeholders meeting.
- Rather than removing cut through traffic on Cade Avenue, several respondents suggested that Cade Avenue be widened to accommodate traffic.
- Concerns with a possible new Cumberland Expressway interchange included concerns over right-of-way impacts and that an additional interchange is not needed.



Concept	Votes against
Roundabout at French Valley Road and US 127	39
Remove traffic signal at Fruit of the Loom Dr.	7
Remove "cut through" traffic on Cade Ave.	7
New Cumberland Expressway Interchange at KY 379	7
Connect Progress Drive and Brian Walters Dr.	5
New Connector Road between US 127 and KY 619	4
Green-T Intersection at KY 430 and US 127	3
Realign Skewed Intersections on KY 80	3
Traffic signals at the Cumberland Expressway	1
Realign right-turn lane on KY 430 at US 127	1
Additional through lanes on US 127 at KY 619	1
Access Management and TWLTL on KY 80	1
Align entrance for Crossroad Development at Voils Road	1
Left turn lanes on US 127 through Bernard Lane	0
Left turn lanes on KY 619 at US 127	0
Stagger afternoon school dismissal and shift changes	0

Are there any improvement concepts you would like removed from consideration?

When asked if there were any additional projects that should be considered, 18 respondents indicated that widening US 127 should be considered, as shown in the table below. The concepts receiving the next most votes included installing new traffic signals (Voils Road, Progress Drive, Bernard Lane, and KY 430 were all mentioned as candidate locations) and installing turn lanes (US 127 at Dowell Road and a TWLTL on KY 80 were both specifically mentioned).

Concept	Votes
Widen US 127	18
New signals	18
Turn lanes	7
Other	5
Speed enforcement/signage	3
French Valley intersection improvements	3
Restriping/repaving	2
Signal timing	2
Progress Dr. improvements	2
Bike lanes	1

Are there any additional improvement concepts you would like the Study Team to examine?



Overall, the short-term improvement concepts were more popular than the long-term improvements. Even though it wasn't shown as a concept, the most popular long-term option seemed to be major widening throughout the study area. While a major widening from three to five lanes would reduce PM peak hour congestion, it would also likely increase speeds and the severity of crashes. The high cost far outweighs the congestion relief benefit, so a major widening was not carried forward after Project Team Meeting No. 1.

Unsurprisingly, the roundabout concept was not popular with the public based on results from the survey. There are common misconceptions about the benefits of roundabouts in areas where people have not experienced them. Russell County currently does not have a roundabout.

- 6. Len then presented an evaluation matrix to compare improvement concepts, as shown in the table below. Improvement concepts that were able to be modeled with the peak hour microsimulation model were assigned a 10-year congestion relief savings based on the vehicle hours traveled (VHT) saved and the average hourly wage in Russell County. To quantify crash reduction savings, crash modification factors (CMFs) were used to determine how many crashes would be reduced by implementing the improvement concept. The total benefit was then divided by the total cost to produce a benefit-to-cost ratio (BCR).
 - It was noted that staggering the school dismissal and employee shift changes had an off the charts BCR because implementing the concept has no cost. KYTC reached out to both the Russell County Schools and major employers on Progress Drive. While the factories were not interested in changing shift times at this time, the Russell County School Superintendent was open to shifting school dismissal 15 minutes. The change was tabled by the School Board for the 2021 2022 school year, but KYTC will work with the Russell County School Superintendent prior to the 2022-2023 school year.
 - KYTC District 8 is pursuing Highway Safety Improvement Program (HSIP) funds for the left-turn lanes on US 127 between Stephens Pipe & Steel and Bernard Lane. Outside of HSIP funds, KYTC District 8 does not have the funding for the Short-Term Improvement Concepts. They will likely have to be developed and funded through Kentucky's Highway Plan under KYTC Item Nos. 8-156 and 8-166.
 - It was noted that the US 127 Safety and Mobility Plan (KYTC Item Nos. 8-156 and 8-166) should be discussed first in the report, before the short-term concepts. The one exception is Short-Term Concept No. 6: working with Russell County Schools and local businesses to stagger dismissal and shift changes prior to the 2022 2023 school year. Given the immediate congestion relief this improvement provides at no cost, it is the top overall priority of the study. All other short-term improvement concepts should be listed in the report in event funding becomes available.



Evaluation Matrix

	US 127 Russell Springs Improvement Study Evaluation Matrix												
		Safety Cost Estimates (Year 2021 Dollars)											
	Improvement Concepts		2045 Build PM Level of Service	10-Year Congestion Relief Savings	Crash Modification Factor	10-Year Crash Reduction Savings	Design	ROW	Utility	Construction	Total	Benefit-Cost Ratio	Public Ranking
ated)	1. Left-Turn Lanes on US 127 between Stephens Pipe & Steel and Bernard Lane	Not Able to Model	Not Able to Model	Not Able to Model	0.73	\$ 600,000	\$ 50,000	s -	ş -	\$ 300,000	\$ 350,000	1.71	2
n Anticip	2. Left-Turn Lanes on KY 619 at US 127 Intersection	с	D	\$ 1,500,000	0.75	\$ 1,000,000	\$ 10,000	s -	ş -	\$ 50,000	\$ 60,000	41.67	3
cquisitio	3. Traffic Signals at the Cumberland Expressway Intersections & Extend Right-Turn Lane	B/C	C/D	\$ 2,100,000	0.95	\$ 600,000	\$ 100,000	s -	s -	\$ 400,000	\$ 500,000	5.40	1
of-Way A	4. Remove "Cut-Through" Traffic on Cade Avenue	Not Able to Model	Not Able to Model	Not Able to Model	0.93	\$ 400,000	s -	s -	ş -	\$ 20,000	\$ 20,000	20.00	7
(No Right-	5. Realign Right-Turn Lane on KY 430 at US 127 Intersection	N/A	N/A	N/A	0.56	\$ 2,200,000	s -	s -	ş -	\$ 60,000	\$ 60,000	36.67	5
t-Term ()	0. Stagger Afternoon School Dismissal and Employee Shifts Changes	D	E	\$ 3,800,000	No CMF	No CMF	s -	s -	s -	s -	s -	3800000.00	4
Short	7. Remove Traffic Signal at Fruit of Loom Drive	A	A	\$ 300,000	No CMF	No CMF	s -	s -	ş -	\$ 50,000	\$ 50,000	6.00	6
Term	1. US 127 Safety & Mobility Improvement Plan (KYTC Item Nos. 8-156 and 8-166)*	с	D	\$ 9,900,000	0.90 (Average)	\$ 2,200,000	\$ 600,000	\$ 900,000	\$ 1,900,000	\$ 3,800,000	\$ 7,200,000	1.68	1
Long-	2. KY 80 Access Management and TWTL from US 127 to Owenstown School Road	Not Able to Model	Not Able to Model	Not Able to Model	0.78	\$ 7,800,000	\$ 300,000	\$ 3,000,000	\$ 2,500,000	\$ 1,700,000	\$ 7,500,000	1.04	2

* Includes Short-Term Improvement Concepts 1-4, Additional Through-Lanes on US 127 North and South of KY 819, Align Entrance for Crossroads Development and Add Let-Turn Lanes on US 127, Green-T Intersection at KY 430, and Intersection Improvement at French Valley Road (assumes roundabout for estimating purposes).



7. Long-Term Improvement Concept Priorities: Concepts were prioritized based on results from the microsimulation model, safety analysis, benefit-to-cost analysis, public outreach, stakeholder feedback, and project team feedback.

The long-term improvement concepts were categorized as high, medium, low, or "not recommended at this time". In the event funding is not available for the short-term improvement concepts discussed on page 11, those improvement concepts are also included under the US 127 Safety and Mobility Plan (KYTC Item Nos. 8-156 and 8-166), shown in **Figure 1**.



Figure 1: US 127 Safety and Mobility Plan



High Priority

- US 127 Safety and Mobility Plan (KYTC Item Nos. 8-156 and 8-166)
 - Dedicated left-turn lanes on KY 619 at US 127
 - Additional through lanes on US 127 north and south of the KY 619 intersection
 - Traffic signals at the Cumberland Expressway interchange
 - Align entrance for Crossroads development
 - Remove "cut-through" traffic on Cade Avenue.
 - o Green-T intersection at KY 430
 - There was a discussion about the Rock Quarry Road connection. Currently it is a low volumes road with no known future developments. As such the Green-T improvement concept assumes Rock Quarry Road will become a right-in/right-out only. If conditions change Rock Quarry Road could be connected to Erik Lane.
 - o Intersection improvement at French Valley Road
 - Option 1 convert to roundabout
 - Option 2 construct second northbound and southbound through lane on US 127 between Progress Drive and KY 430

Medium Priority

• KY 80 access management and TWLTL from US 127 to Owenstown School Road

Low Priority

• Realign skewed intersections on KY 80

Not recommended at this time

- New Cumberland Expressway interchange at KY 379
- Connect Progress Drive and Brian Walters Drive
- New connector road between US 127 and KY 619

The collection of projects included in the US 127 Safety and Mobility Plan would significantly improve the 2045 PM peak hour traffic operations. During the No-Build scenario, the French Valley Road intersection will operate at Level of Service (LOS) F and the KY 619 intersection will operate at LOS E in 2045. Several approaches to other intersections, including the Cumberland Expressway, will also operate at LOS F. The US 127 Safety and Mobility Plan would improve traffic operations so that all intersections in the study area operate at a desirable LOS D or better, as shown in **Figure 2**.



2045 Build



Figure 2: 2045 PM Peak Hour Level of Service

8. Short-Term Improvement Concept Priorities: The short-term improvement concepts address existing concerns on US 127 and are not anticipated to require right-of-way acquisition. They were prioritized into high, medium, and low priorities in the event funding becomes available to address these concerns prior to the implementation of the long-term US 127 Safety and Mobility Plan (KYTC Item Nos. 8-156 and 8-166). Because the long-term plan builds on the short-term improvement concepts, resources would not be wasted if any or all of the spot improvement concepts were built first.

High Priority

Work with Russell County Schools and local businesses to stagger dismissal and shift changes prior to the 2022 - 2023 school year. This project had the highest BCR. Given the immediate congestion relief this improvement provides at no cost, it is the top overall priority of the study.



Medium Priority (in no particular order)

- Left-turn lanes on US 127 between Stephens Pipe & Steel and Bernard Lane. This project was ranked as the second highest priority by the public.
- Left-turn lanes on KY 619 at the US 127 intersection. This project was ranked as the third highest priority by the public and had the third highest BCR.
- Traffic signals at the Cumberland Expressway & extension of the right turn lane at KY 619 to the westbound off-ramp of the Cumberland Expressway. This project was ranked as the highest priority by the public.
- Remove "cut-through" traffic on Cade Avenue. This project had the third highest BCR.
- Realign the right-turn lane on KY 430 at US 127. This project had the second highest BCR.

Low Priority

- Remove traffic signal at Fruit of the Loom Drive. The intersection operates at a LOS A and has a negative excess expected crash rate, meaning there are less crashes than would be expected. The public and local officials noted the gas station at this intersection generates significant traffic and that the signal is still needed.
- 9. The next step is for Stantec to submit a draft report in November.

The meeting ended at approximately 11:00 a.m. CDT.